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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,363	12/12/2003	Jerrel C. Anderson	AD7079 USNA	2812

23906 7590 10/06/2006

E I DU PONT DE NEMOURS AND COMPANY  
LEGAL PATENT RECORDS CENTER  
BARLEY MILL PLAZA 25/1128  
4417 LANCASTER PIKE  
WILMINGTON, DE 19805

EXAMINER
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CHEN, VIVIAN

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/734,363

Applicant(s)

ANDERSON, JERREL C.

Examiner

Vivian Chen

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4,13,19-21,23,24,26 and 28-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13,19-21,23,24,26,31,32 and 34-55 is/are allowed.
- 6) ☒ Claim(s) 1,4,28,33 and 56-59 is/are rejected.
- 7) ☒ Claim(s) 29-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**DETAILED ACTION**

1. Claims 2-3, 5-12, 14-18, 22, 25, 27 have been cancelled by Applicant.

***Claim Objections***

1. The claim rejections under 37 CFR 1.75(c) in the previous Office Action has been withdrawn in view of Applicant's amendments filed 7/21/2006.

***Claim Rejections - 35 USC § 112***

2. The rejections under 35 U.S.C. 112, second paragraph, in the previous Office Action has been withdrawn in view of Applicant's amendments filed 7/21/2006.

***Claim Rejections - 35 USC § 103***

2. Claims 1, 4, 28, 33, 56-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over KOTANI ET AL (US 5,766,751) or KOTANI ET AL (US 5,969,029),  
in view of POLYMER TECHNOLOGY DICTIONARY.

KOTANI ET AL '751 or '029 discloses a laminate comprising a polyester layer (e.g., polyethylene terephthalate), an intermediate layer comprising polyallylamine, and a second polymer layer (e.g., ionomer), and articles thereof, wherein the laminate is formed by applying polyallylamine coating on a base film (e.g., PET), contacting a second polymer layer (e.g., ionomer) to the coating layer, followed by lamination. (KOTANI ET AL '751, line 37-48, col. 9; line 1-46, col. 16; Figure 4) (see corresponding portions of KOTANI ET AL '029)

POLYMER TECHNOLOGY DICTIONARY discloses that it is well known in the art that ionomers are typically refers to ethylene (meth)acrylic acid copolymers. (see entries for "ionomer" and "ethylene-acrylic acid copolymer")

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form laminate films comprising a polyester layer, an intervening polyallylamine layer, and a second polymer layer such as an ionomer ( using conventional lamination methods and conditions. In-line coating is a well known method of applying coatings to polyester films (claim 56). One of ordinary skill in the art would have used conventional lamination methods such as the application of heat (claim 57) to adhere the components of the laminate together.

### ***Response to Arguments***

3. Applicant's arguments filed 7/21/2006 have been considered but are moot in view of the new ground(s) of rejection.

(A) Applicant argues that the KOTANI references fail to disclose a multilayer structure comprising a polyester layer, a polyallylamine layer, and a second polymer layer, said polyallylamine layer in direct contact with the second polymer layer. However, contrary to Applicant's assertions, the references clearly disclose laminate structures (e.g., Figure 5) containing a polyester (e.g., PET) film (reference number 3), an intermediate layer containing polyallylamine (reference number 1) coated on said polyester film, and an additional polymer layer in direct contact with the polyallylamine layer (reference number 4), wherein the additional

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polymer layer can be an ionomer (line 45-46, col. 16). It is well known in the art that the term "ionomer" typically refer to ethylene (meth)acrylic acid copolymers.

***Allowable Subject Matter***

4. Claims 13, 19-21, 23-24, 26, 31-32, 34-55 are allowed.
5. Claims 29-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter:  
  
The prior art of record fails to disclose the recited multilayer laminates comprising one or more polyester layers coated with polyallylamine on at least one surface, wherein the laminates further comprise: (1) multiple polymer layers selected from the recited Markush group (claim 13, 26, 41); (2) the recited articles (claims 29-30); (3) a glass layer (claim 41); (4) a hardcoat (claim 48, 52).

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (571) 272-1506. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached on (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

The General Information telephone number for Technology Center 1700 is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 29, 2006



Vivian Chen  
Primary Examiner  
Art Unit 1773